

Remarks

The Examiner and Applicants' attorney, David Chen, discussed the rejections and suggestions for possibly overcoming the rejections. Applicants' attorney thanks the Examiner for his time and suggestions and respectfully submits the foregoing amendments put the claims in condition for allowance.

Applicants are presenting this Preliminary Amendment with a Request for Continued Examination and payment for the Request for Continuing Examination. Applicants do not believe any fee is owed. However, in the event there is an outstanding fee, Applicants authorize the Examiner to charge account number 19-4516.

The Examiner required a newly executed oath specifying the serial number and filing date of this patent application in the previous office action. Enclosed please find the newly executed oath as required.

The Examiner objected to claims 13 and 14 as being substantially duplicative of claims 3 and 11, respectively. Claims 16 and 17 were objected to for similar reasons. Applicants cancelled claims 3 and 11 to obviate the objections.

The Examiner rejected claims 1-17 under 35 USC 112 as being indefinite because the claims do not specify whether or not the electrolyte 30 is spaced apart from the substrate in the areas of where the conductive film is located or elsewhere. Applicants submit the electrolyte 30 is spaced apart from the substrate at all locations and not only

in the areas where the conductive film is located. The electrolyte does not contact the substrate in areas where the film is absent, as indicated in the office action. Figures 1 and 2 are amended to more distinctly show electrolyte 30 being spaced apart from substrate 12.

The Examiner rejected claims 1-4, 6, 8, 9, 13, and 15 under 35 USC 102 and 35 USC 103 as being anticipated by or obvious in view of U.S. Patent 6,218,036 to Shiratori ("Shiratori"). The Examiner rejected claims 1, 3, 4, 6-9, and 11-17 under 35 USC 102 and 35 USC 103 as being anticipated by or obvious in view of U.S. Patent 5,492,611 to Sugama ("Sugama").

All claims require, among other elements, a substrate having a notch, an electrolytic material spaced apart from the substrate, a film of electrode material between and in direct physical contact with both the substrate and electrolytic material, and a passage defined by the notch, film of electrode, and electrolytic material for permitting gas flow, wherein the gas simultaneously contacts the film and electrolytic material. Neither Shiratori nor Sugama discloses a passage defined by the notch in the substrate, the film of electrode, and the electrolytic material for permitting gas flow wherein the gas simultaneously contacts the film and electrolytic material.

Shiratori requires a charge collector be placed between the electrode 7 or 9 and the separator, which the Examiner equates to Applicants' substrate. Hence, the electrode cannot be in direct physical contact with the separator and electrolytic

material at the same time, as claimed in all of Applicants' claims. Further, Shiratori does not disclose, teach, or suggest a passage be defined by the notch in the substrate, the electrode, and the electrolytic material for permitting gas to flow wherein the gas simultaneously contacts the electrode and electrolytic material. As shown in Shiratori's figure 2a, gas in the substrate notch is unable to come in contact with the electrolytic material because of the charge collector and electrode being in between. Therefore, Shiratori does not anticipate or render obvious Applicants' claimed invention and the rejections should be withdrawn.

Sugama requires an insulating layer 203 be placed between the electrode 204 or 205 and substrate 201. Hence, the electrode cannot be in contact with the substrate, as claimed in all of Applicants' claims. Even assuming the insulating layer 203 is equated with glass (as suggested by the Examiner in paragraph 24 of the outstanding office action in combination with U.S. Patent No. 5,194,133), the resulting sensor does not include a passage defined by the notch in the substrate, the electrode, and the electrolytic material for permitting gas to flow wherein the gas simultaneously contacts the electrode and electrolytic material. As shown in Sugama's figure 2c, there is no passage, never mind a passage for defined by the notch, electrode, and electrolytic material. Therefore, Sugama does not anticipate or render obvious Applicants' claimed invention and the rejections should be withdrawn.

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Response to Official Action

Respectfully submitted,



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